

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
4 November 2004 (04.11.2004)

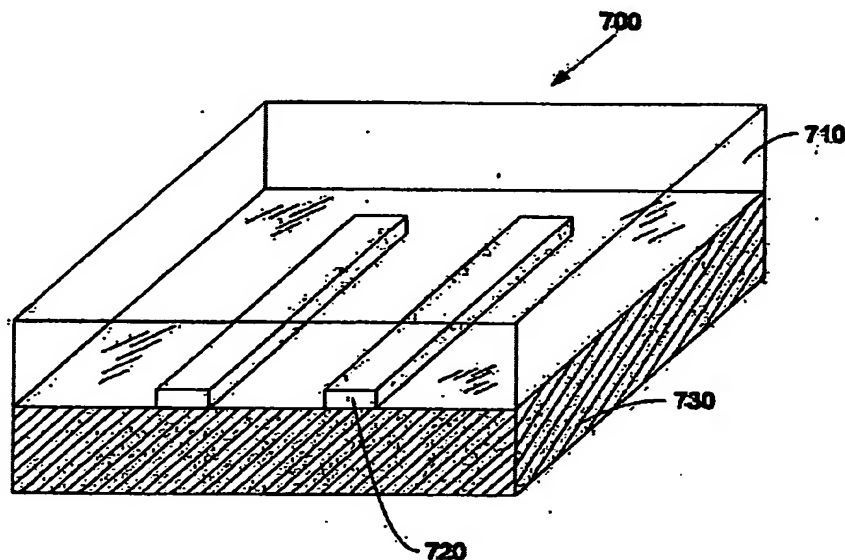
PCT

(10) International Publication Number
WO 2004/094586 A2

- (51) International Patent Classification⁷: **C12M** Stephanie [US/US]; 995 Massachusetts Avenue, Unit 304, Arlington, MA 02476 (US).
- (21) International Application Number: **PCT/US2004/011796** (74) Agents: **HIRSHMAN, Jesse, A. et al.**; Kirkpatrick & Lockhart LLP, Henry W. Oliver Building, 535 Smithfield Street, Pittsburgh, PA 15222-2312 (US).
- (22) International Filing Date: **16 April 2004 (16.04.2004)**
- (25) Filing Language: **English** (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (26) Publication Language: **English**
- (30) Priority Data: **60/464,010** **18 April 2003 (18.04.2003)** **US**
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- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK,

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(54) Title: **THREE-DIMENTIONAL, FLEXIBLE CELL GROWTH SUBSTRATE AND RELATED METHODS**



(57) Abstract: An engineered cell growth substrate is provided along with an apparatus containing the substrate. The substrate contains features, including, without limitation: an extracellular matrix mimetic, areas of differing elasticity moduli and/or 3-dimensional engineered formations, such as grooves or protuberances. Methods of fabricating the cell growth substrate, methods of growing cells on the substrate, and methods of evaluating analytes on cells on the substrate also are provided.